

AMENDMENTS TO THE CLAIMS

Listing of Claims:

Claim 1 (currently amended): A thin-film transistor structure, at least essentially mainly comprising:

- an insulating substrate;
- a gate electrode on said insulating substrate;
- a dielectric layer over said gate electrode;
- a first semiconductive layer on said dielectric layer;
- a second semiconductive layer on said first semiconductive layer;
- a first conductive layer on said second semiconductive layer;
- a second conductive layer on said first conductive layer, said second conductive layer is used as a source and a drain;
- a third conductive layer on said second conductive layer, wherein said first, said second and said third conductive layers are made of identical metal-based alloy layers; and
- an opening through said second semiconductive layer, said first conductive layer, said second conductive layer and said third conductive layer and exposing said first semiconductive layer.

Claim 2 (original): The thin-film transistor structure according to claim 1, wherein said gate electrode comprises an AlNd gate electrode.

Claim 3 (original): The thin-film transistor structure according to claim 1, wherein said dielectric layer comprises a silicon nitride layer.

Claim 4 (original): The thin-film transistor structure according to claim 1, wherein said first semiconductive layer comprises a hydrogenated amorphous silicon layer.

Claim 5 (original): The thin-film transistor structure according to claim 1, wherein said second semiconductive layer comprises an N-type amorphous silicon layer.

Claim 6 (original): The thin-film transistor structure according to claim 1, wherein said first conductive layer prevent said second conductive layer and said second semiconductive layer from diffusing into each other.

Claim 7 (original): The thin-film transistor structure according to claim 1, wherein said third conductive layer is used as a glue layer and protects said second conductive layer from being over-etched.

Claim 8 (original): The thin-film transistor structure according to claim 1, wherein said first conductive layer, said second conductive layer and said third conductive layer comprise a sandwich structure of AlNdN, AlNd and AlNdN alloys.

Claim 9 (original): A thin-film transistor structure, at least comprising:

- an transparent insulating substrate;
- a gate electrode on said transparent insulating substrate;
- a dielectric layer over said gate electrode;
- a first semiconductive layer on said dielectric layer;
- a second semiconductive layer on said first semiconductive layer;
- a first AlNdN alloy layer on said second semiconductive layer;
- an AlNd alloy layer on said first AlNdN alloy layer, said AlNd alloy layer is used as a source and a drain;
- a second AlNdN layer on said AlNd alloy layer; and
- an opening through said second semiconductive layer, said first AlNdN alloy layer, said AlNd alloy layer and said second AlNdN layer and exposing said first semiconductive layer.

Claim 10 (original): The thin-film transistor structure according to claim 9, wherein said first AlNdN alloy layer has a thickness of about 500 angstroms.

Claim 11 (original): The thin-film transistor structure according to claim 9, wherein said AlNd alloy layer has a thickness of about 2000 angstroms.

Claim 12 (original): The thin-film transistor structure according to claim 9, wherein said second AlNdN alloy layer has a thickness of about 500 angstroms.

Claim 13 (currently amended): A thin-film transistor structure, said thin-film transistor structure comprising:

- an insulating substrate;
- a gate electrode on said insulating substrate;
- a dielectric layer over said gate electrode;
- a hydrogenated amorphous silicon layer on said dielectric layer;
- an amorphous silicon layer on said hydrogenated amorphous silicon layer;
- a first conductive layer on said amorphous silicon layer;
- an AlNd alloy layer on said first conductive layer, said AlNd alloy layer is used as a source and a drain; and
- a second conductive layer on said AlNd alloy layer, said second conductive layer is used as a glue layer and to protect said AlNd alloy layer from being over-etched, wherein said first and said second conductive layers are made of aluminum-based alloy layers.

Claim 14 (original): The thin-film transistor structure according to claim 13, wherein said first conductive layer prevents said AlNd alloy layer and said amorphous silicon layer from diffusing into each other.

Claim 15 (original): The thin-film transistor structure according to claim 13, wherein said first conductive layer and said second conductive layer comprise AlNdN alloy layers.